

REMARKS

Claims 1, 9 and 14-15 are amended. Support for the amendments is found in the specification and claims as filed. Accordingly, the amendments do not constitute the addition of new matter.

Claim 16 is cancelled without prejudice. As a result, claims 1-15 and 17-18 remain pending in the present application. Reconsideration of the application in view of the foregoing amendments and following comments is respectfully requested.

Claim Rejection - 35 U.S.C. §103

With respect to Paragraph 1 of the Office Action, the Office Action rejected claims 1-18 under 35 U.S.C. §103(a) as being unpatentable over Yanagisawa et al. (USPN: 6,621,489) in view of Cho (USPN: 6,081,902). Of the rejected claims, only claims 1, 9 and 14 are independent.

Accordingly, applicants respectfully request that the rejection be withdrawn.

(c. all claims limitations must be taught)

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP §2143.03 All Claim Limitations Must Be Taught or Suggested)

Independent claims 1, 9 and 14 define a method for reducing the residual image effect of a liquid crystal display after turned off and a related system. In these independent claims 1, 9 and 14, a plurality of thin film transistors on the liquid crystal display is turned on after turning off the image data transmission to discharge residual charges.

With particular reference to Yanagisawa, the purpose of the prior art is related to a LCD display unit, and Yanagisawa fails to teach that a plurality of thin film transistors on the liquid crystal display is turned on **after turning off the image data transmission** to discharge residual charges. Referring to Fig. 4(b) of Yanagisawa, Yanagisawa teaches that

the gate voltage is turned off at the end of the specific time period T3 while the source voltage is turned off at the end of the specific time period T5. In other words, the gate voltage is turned on **before the source voltage [the image data transmission] is turned off**. Furthermore, Fig. 4 (b) of Yanagisawa also shows that the pixel/capacitor voltage is still at high level when the gate voltage is turned on. That is, the residual charges can not be discharged by turning on the gate voltage in Yanagisawa because the source voltage is still at high level. In fact, the residual charges are discharged after the gate voltage is turned off in Yanagisawa (column 8 lines 16-18).

Moreover, Cho does not teach that a plurality of thin film transistors on the liquid crystal display is turned on **after turning off the image data transmission** to discharge residual charges as well.

Since neither Yanagisawa nor Cho teaches that a plurality of thin film transistors on the liquid crystal display is turned on **after turning off the image data transmission** to discharge residual charges, even if Yanagisawa and Cho were to be combined in the manner proposed, the proposed combination would not show all of the novel physical features of claims 1, 9 and 14 as discussed above. Therefore, the novel features of claims 1, 9 and 14 are unobvious and patentable over these references.

Accordingly, Applicant respectfully submits that independent claims 1, 9 and 14 as amended are allowable over the art of record and respectfully requests the 35 U.S.C. §103(a) rejection of claims 1, 9 and 14 to be reconsidered and withdrawn. In addition, insofar claims 2-8, 10-13, 15 and 17-18 depend from independent claims 1, 9 and 14 respectively and add further limitations thereto, the 35 U.S.C. §103(a) rejection of these claims should be withdrawn as well.

Reconsideration and withdrawal of this rejection is respectfully requested.

Other cited references of record have been studied, and are found no more relevant to the present invention than the applied art.

All claims in the present application are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

Conclusion

For all of the above reasons, applicants submit that the specification and claims are now in proper form, and that the claims define patentably over prior arts. Therefore applicants respectfully request issuance for this case at the Office Action's earliest convenience.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,



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